APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,630	07/01/2003	Jun Moroo	1086.1183	8592

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EXAMINER
TABATABAI, ABOLFAZL

ART UNIT	PAPER NUMBER
2624	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2007*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *July 1, 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/23/2008*.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October

31, 2007, has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed
> or described as set forth in section 102 of this title, if the differences between the
> subject matter sought to be patented and the prior art are such that the subject
> matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was
> made.-

3. Claims 1-4, 6-9, 11-14 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Yoshiura et al (U. S. 6,131,162) in view of Hirai (U. S.

2002/00833324 A1).

Regarding claim 1, Yoshiura discloses an image data processing

apparatus comprising:

a first apparatus which enters, from an image on a medium, image data with

embedded stegano data that cannot be recognized visually (column 32, lines 1-10), the

first apparatus sending the entered image data to the outside with destination

information (column 12, lines 1-10) and receiving the result of processing from the

outside (column 19, lines 57-63 and column 29, lines 17-27) for holding the same

(column 17, lines 13-17 and column 18, lines 10-21), said first apparatus having a low

processing capability for processing stegano data (column 9, lines 10-19).

However, Yoshiura is silent about the specific details regarding the step of:

a second apparatus which receives said image data and destination information

from said first apparatus, effects data processing on the image data received from the

first apparatus to acquire stegano data, the second apparatus sending the acquired

stegano data as the result of processing to the first apparatus in accordance with said

destination information, said second apparatus having a high processing capability for

processing stegano data.

In the same field of endeavor (image processing), however, Hirai discloses information

embedding apparatus and method, information processing apparatus and method,

content processing apparatus and method, monitoring apparatus and method, and

storage media comprising the step of:

a second apparatus which receives said image data and destination information

[page 1, column 2, paragraph (0009)], from said first apparatus, effects data processing

on the image data received from the first apparatus to acquire stegano data [page 4,

paragraph (0059) and page 5, paragraph (0061)], the second apparatus sending the

acquired stegano data as the result of processing to the first apparatus in accordance

with said destination information [page 2, column 2, paragraph (0022) and page 2,

column 2, paragraph (0027)], said second apparatus having a high processing capability for processing stegano data [page 4, column 1, paragraph (0046) page 6, column 2, paragraphs (0087 and (0089)].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use sending the acquired stegano data as the result of processing to the first apparatus as taught by Hirai in the system of Yoshiura because Hirai provides Yoshiura an improved digital watermark technique for writing new digital watermarks without the loss of quality of the original content and also for achieving content protection while ensuring the convenience of secondary users of content with digital marks [page 2, paragraphs (0020) and (0021)].

Regarding claim 2, Yoshiura discloses the image data processing apparatus according to claim 1, wherein the first apparatus comprises: an image data input unit which enters image data with stegano data embedded (column 32, lines 1-10); a data sending unit which sends the entered image data to the outside (column 17, lines 7-15); a result data receiving unit which receives the processed result data from the second apparatus (column 29, lines 17-27); and a result holding unit which holds the received result data (column 18, lines 10-21); and a display unit which displays the received result data (fig. 25, element 1102).

However, Yoshiura is silent about the specific details regarding the step of:

Wherein the second apparatus comprises: an image data receiving unit which receives image data from the first apparatus, a data holding unit which holds the received image data; an image data processing unit which effects processing on image

data to acquire stegano data; and a result data sending unit which sends the acquired

stegano data as result data to the first apparatus, and wherein a communication path

always or intermittently connects the first apparatus and the second apparatus.

In the same field of endeavor (image processing), however, Hirai discloses information

embedding apparatus and method, information processing apparatus and method,

content processing apparatus and method, monitoring apparatus and method, and

storage media comprising the step of:

the second apparatus comprises: an image data receiving unit which receives

image data from the first apparatus [page 4, paragraph (0059 and page 5, paragraph

(0061)], a data holding unit which holds the received image data [page 6 paragraphs

(0099 and (0154)]; an image data processing unit which effects processing on image

data to acquire stegano data; and a result data sending unit which sends the acquired

stegano data as result data to the first apparatus [page 6 paragraphs (0087 and (0089)],

and wherein a communication path always or intermittently connects the first apparatus

and the second apparatus [page 8 paragraph (0113)].

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to use sending the acquired stegano data as the result of

processing to the first apparatus and communication path as taught by Hirai in the

system of Yoshiura because Hirai provides Yoshiura an improved digital watermark

technique for writing new digital watermarks without the loss of quality of the original

content and also for achieving content protection while ensuring the convenience of

secondary users of content with digital marks [page 2, paragraphs (0020) and (0021)].

Regarding claim 3, Yoshiura discloses the image data processing apparatus according to claim 1, wherein the second apparatus converts the acquired stegano data into URL, for sending as result data to the first apparatus, and wherein the first apparatus sends the data the URL received from the second apparatus to an external third apparatus, for receiving another result of processing (column 24, lines 53-67 and column 26, lines 22-26).

Regarding claim 4, Yoshiura discloses the image data processing apparatus according to claim 1, wherein the first apparatus includes a pre-processing unit which executes pre-processing of converting the image data into binary image data, the pre-processing being part of image processing to be performed on the side of the second apparatus (column 25, lines 3-9).

Regarding claim 6, Yoshiura discloses the image data processing apparatus according to claim 1, wherein the first apparatus compresses image data entered and held, for sending to the second apparatus, and wherein the second apparatus restores the compressed image data received from the first apparatus, for effecting image processing (column 3, lines 1-3).

Claim 7 is similarly analyzed as claim 1 above.

Claim 8 is similarly analyzed as claim 3 above.

Claim 9 is similarly analyzed as claim 4 above.

Claim 11 is similarly analyzed as claim 6 above.

Regarding claim 12, Yoshiura discloses an apparatus which has a low

processing capability for processing stegano data, comprising:

an image data input unit which enters image data, from an image on a medium, with stegano data embedded (column 32, lines 1-10);

a data sending unit which sends the entered image data to the outside with destination information (fig. 2, element 116 and column 12, lines 1-10);

a result data receiving unit which receives stegano data as result data from the outside (column 19, lines 57-63 and column 29, lines 17-27);

a result holding unit which holds the received result data (column 9, lines 10-19; column 17, lines 13-17 and column 18, lines 10-21); and,

a display unit which displays said received result data (fig. 25, element 1102).

Claim 12 is similarly analyzed as claim 7 above.

Claim 13 is similarly analyzed as claim 1 above.

Regarding claim 14, Yoshiura discloses a method comprising:

transmitting, from a portable electronic device (column 8, lines 6-8), image data of an image embedded with stegano data to a server (column 28, lines 29-41 and column 29, lines 17-30); and,

receiving, from the server, the embedded stegano data (column 27, lines 60-65 and column 31, lines 41-47).

4.   Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiura et al (U. S. 6,131,162) and Hirai (U. S. 2002/00833324 A1) as applied to claims 1, 7 and further in view of Stach et al (U. S. 7,068,809 B2).

Regarding claim 5,Yoshiura and Hirai are silent about the specific details

regarding the image data processing apparatus according to claim 1, wherein the first apparatus splits the entered image data into a plurality of areas, to send some of the split image data to the second apparatus, and wherein the second apparatus effects image processing on the some image data received from the first apparatus, the second apparatus, if stegano data cannot be acquired, sequentially requesting the first apparatus to make a re-transfer, for image processing, of image data of the remaining split areas until the second apparatus acquires stegano data.

In the same field of endeavor (image processing), however, Stach discloses segmenting digital watermarking comprises he first apparatus splits the entered image data into a plurality of areas, to send some of the split image data to the second apparatus, and wherein the second apparatus effects image processing on the some image data received from the first apparatus, the second apparatus, if stegano data cannot be acquired, sequentially requesting the first apparatus to make a re-transfer, for image processing, of image data of the remaining split areas until the second apparatus acquires stegano data (abstract and column 6, lines 12-20).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use segmentation process as taught by Stach in the system of Yoshiura because Stach provides Yoshiura an improved digital watermark technique which has ability to hide the auxiliary data more effectively by adapting the watermark signal to the perceptual attributes of a region.

Claim 10 is similarly analyzed as claim 5 above.

Other prior art Cited

5.   The prior art made of record and not relied upon is considered pertinent

to applicant's disclosure.

Ehrmann et al (U S 7,013,023 B2) disclose method and device for sending

and receiving digital images using an image watermark for decoding.

Tian et al (U S 6,683,966 B1) disclose watermarking recursive hashes into

frequency domain regions.

Fujihara et al (U S 7,050,604 B2) disclose image protection technique.

Contact Information

6.   Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to ABOLFAZL TABATABAI whose telephone number is

(571) 272-7458.

The Examiner can normally be reached on Monday through Friday from 9:30 a.m. to

7:30 p.m. If attempts to reach the Examiner by telephone are unsuccessful, the

Examiner's supervisor, Bhavesh Mehta, can be reached at (571) 272-7453. The fax

phone number for organization where this application or proceeding is assigned is (571)

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Abolfazl Tabatabai

Patent Examiner

Technology Division 2624

February 1, 2008